Arr. IV.—Additions to and Alterations in the Catalogue of the Marine Shells of Victoria.

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(With Plate III.).

[Read 12th July, 1917].

In this paper we have added four more species to, and deleted six from the catalogue, and revised the generic and specific names of others.

MUREX FIMBRIATUS, Lamarck.

1822. Murex fimbriatus, Lamarck. Anim. s. vert. vol. vii., p. 176.

1845. Murex planiliratus, Reeve. Conch. Icon, vol. iii., pl. 31, f. 149.

1898. Murex planiliratus. Reeve. Pritchard and Gatliff, P.R.S. Vic., vol. x. (New Series), p. 254.

1902. Murex planiliratus, Reeve. Hedley, P.L.S., N.S.W., vol. xxvi., p. 700.

1916. Craspedotriton fimbriatus, Lamarck. Hedley, Jour. Royal Soc. Western Australia, vol. i., for 1915, p. 64.

Hab .- West Head, Western Port; Portland.

Obs.—Reeve's remarks about Ricinula fiscellum, Broderip, are rather lengthy; he gives a very good figure of that species; it differs entirely from his figure of M.planitiratus. He concludes by stating: "It only remains to enquire of M. Kiener whether the shell mistaken for it (M.fiscellum), and which received so many names in different States, is not the Murex fimbriatus Lam." Mr. Hedley has cleared up this difficulty by examining Lamarck's specimens in the

Geneva Museum of M.fimbriatus; but we do not think Dall's definition of Craspedotriton permits of the inclusion of this species. We have a specimen before us of Triton convolutus, Broderip, the type of Dall's genus Craspedotriton, and also his description of the genus.

In his description of M.fimbriatus, Lamarck says: "Apertura roseo-violacesente," this indicates its inclusion as a Coralliophila. None of our specimens of M. planiliratus from this coast or from Western Australia have any coloration within the mouth.

Genus Kalydon, Hutton 1884.

Kalydon vinosus, Lamarck.

1822. Buccinum vinosum, Lamarck. Anim. s. vert, vol. vii., p. 275.

1898. Sistrum adelaidensis, Crosse and Fischer. Pritchard and Gatliff. P.R.S. Vic., vol. x. (New Series), p. 259.

1913. Kalydou vinosus, Lamarck. Hedley, P.L.S. N.S.W. vol. xxxviii., p. 330.

Hab.—Coast generally. A common littoral species.

Obs.—Lamarck's type has never been figured, and its identity was unknown here until Mr Hedley examined it in the Geneva Museum. He says: "Three specimens apparently cotypes of Buccinum vinosum."

We agree with Mr. Hedley that it has been misplaced in the genus Sistrum.

In form and sculpture this species varies greatly. It attains to a length of 22 mm., and the adult form usually developes four or five strong denticles within the outer lip.

DIALA PULCHRA, A. Adams.

 Alaba pulchra, A. Adams. A.M.N.H., vol. x., 3rd ser., p. 296, No. 15.

1902. Diala pulchra, A. Adams. Pritchard and Gatliff P.R.S., Vic., vol. xiv., p. 89.

1913. Diåla pulchra, A. Adams. Hedley, P.L.S. N.S.W., vol. xxxviii., p. 286, pl. 18, fig. 57.

1915. Diala pulchra, A. Adams, May, P.R.S. Tas., p. 77. Hab.—Port Phillip; Western Port.

Obs.—A rather common species. Figured for the first time by Mr. Hedley, as above quoted.

DIALA VARIA, A. Adams.

1861. Diala varia, A. Adams. A.M.N.H. vol. viii., 3rd ser., p. 243.

1902. Diala varia, A. Adams. Pritchard and Gatliff. P.R.S. Vic., vol. xiv., p. 89.

1913. Diala varia, A. Adams. Hedley, P.L.S. N.S.W., vol. xxxviii., p. 286, pl. 18, fig. 56.

Hab.—Western Port; Puebla Coast.

Obs.--Figured for the first time by Mr. Hedley, as above quoted.

Tornatina fusiformis, A. Adams.

1854. Bulla (Tornatina fusiformis, A. Adams. Thes. Conch., vol. ii., p. 570, pl. 121, f. 37.

1859. Tornatina apicina, Gould. Proc. Bost. Soc. Nat. Hist. vol. vii., p. 139.

1862. Tornatina apicina, Gould. Otia Conch. p. 112.

1878. Tornatina apicina, Gould. T. Woods, P.L.S. N.S.W. vol. ii., p. 256.

1883. Utriculus avenarius, Watson. J.L.S. Lon., vol. xvii., p. 328.

1886. Utriculus avenarius, Watson. Chall, vol. xv., p. 658, pl. 49, f. 5.

1893. Tornatina apicina, Gould. Pilsbry, Tryon Man. Conch. vol. xv., p. 201.

1893. Tornatina avenaria, Watson. Pilsbry, Id. p 202, pl. 24, f. 37 and 38,

1903. Tornatina fusiformis, A. Adams. Pritchard and Gatliff, P.R.S. Vic. vol. xv. for 1902, p. 212.

1903. Tornatina brenchleyi, Angas. Pritchard and Gatliff. Id. p. 212.

1912. Tornatina fusiformis. A. Adams. Verco, T.R S.S.A., vol. xxxvi., p. 204.

1913. Retusa apicina, Gould. Hedley, P.L.S., N.S.W., vol. xxxviii., p. 337.

1916. Retusa apicina, Gould: Hedley, Jour. Royal Soc. Western Australia, vol. i., for 1915, p. 72.

Hab.—Sandringham, Sorrento, Portsea, Port Phillip; Balnarring, Shoreham, Flinders, San Remo, Western Port; Kilcunda; Portland.

Obs.—We are of opinion, after examining numerous examples of this species, from this coast, New South Wales, and Tasmania, that although they differ in size, length of spire, and outline of the lip—which is occasionally more patulous—that there is only one species, as indicated above, and that the specimens that we have examined exhibit the slight variation comprised in the description and figures of the forms included in the above synonymy.

We also have examples of the species from Durban, South Africa, and from the same locality, *T. hofmani*, Angas.

Pilsbry remarks on the genus, ¹ "Tornatina differs from Retusa in the conspicuously channeled suture, and the peculiar projecting apex." These are distinguishing features in the type of the genus *T. voluta*, Quoy and Gaimard.

Iredale asserts² that the genus Tornatina is a synonym of Retusa. Before accepting this we should like to examine the apex of what is authentically regarded as being typical species of Retusa.

LEPIDOPLEURUS CANCELLATUS, Sowerby.

1908. Lepidopleurus cancellatus, Sowerby, Gatliff and Gabriel, P.R.S. Vic., vol. xxi. (New Series), p. 383.

Obs.—We withdraw the record of the occurrence of this species on our coast. Our shell so identified is the species named, Ischnochiton gabrieli, Hull.

LEPIDOPLEURUS COLUMNARIUS, Hedley and May.

1908. Lepidopleurus columnarius, Hedley and May, Rec. Aust. Mus. vol. vii., p. 123, pl. 24, f. 27, 28.

1912. Lepidopleurus pelagicus, Torr, T.R.S.S.A., vol. xxxvi., p. 165, pl. 5, f. 2a-f.

1913. Lepidopleurus columnarius, Hedley and May. Gatliff and Gabriel, P.R.S. Vic. vol. xxvi. (New Series), p. 78.

Hab.—Bass Straits, Commonwealth trawler "Endeavour."

Obs.—Dr. Torr has kindly permitted us to examine with him his type of L.pelagicus, and we find it conspecific.

Ischnochiton wilsoni, Sykes.

1896. Ischnochiton wilsoni, Sykes. P. Malac. Soc. Lond. vol. ii., p. 89, pl. 6, f. 1, 1a.

I Tryon Man. Conch., vol. xv., p. 182.

² P. Mal. Soc. Lond., vol. xi., 1915, p. 300.

1903. Ischnochiton wilsoni, Sykes. Pritchard and Gatliff, P.R.S. Vic., vol. xv. (New Series), for 1902, p. 202.

1912. Ischnochiton levis, Torr, T.R.S.S.A. vol. xxxvi. p. 168, pl. 6, f. 6 a-f.

Hab.—Port Phillip Heads (J. B. Wilson).

Obs.—Dr. Torr also gave us the type of his species to compare it with the type of I.wilsoni, which is in our National Museum. This we have done, and find it to be conspecific. He has requested us to record this fact. His specimen is three-quarters the length of the type of I.wilsoni, which has ten slits in the tail valve. Dr. Torr's has eight or nine in the tail valve. It has been preserved in a solution of formalin, and, consequently, lost most of its coloration, and is in a bad state of preservation. The figure of the head valve of I.wilsoni shows twelve slits regularly disposed. The description states that it has nine slits irregularly disposed.

ISCHNOCHITON PROTEUS, Reeve.

1847. Ischnochiton proteus, Reeve. Conch. Icon. vol. iv., pl. 18, f. 111.

1867. Lepidopleurus proteus, Reeve. Angas, P.Z.S., Lond., p. 222.

1892. Ischnochiton divergens, Pilsbry, (not of Reeve), Tryon's Man. Conch. vol. xiv., p. 91, pl. 22, f. 74-77.

1916. Ischnochiton proteus, Reeve. Iredale and May, P. Mal. Soc. Lond. vol. xii., pp. 109 and 110.

Hab.—Ocean beach, Point Nepean; Shoreham, and San Remo, Western Port.

Obs.—We have had specimens sent to us from New South Wales under the name of I.divergens, Reeve, but that species has minute girdle scales; in I.proteus they are large and solid; in both species the scales are transversely striated.

It is a handsome species, the predominating colour being green. Interior of tail plate has a central crescent of blackish-green, and in some specimens the interior of the median valves are stained in the centre with magenta colour.

Ischnochiton atkinsoni, Iredale and May.

1916. Ischnochiton atkinsoni, Iredale and May. P. Mal. Soc. Lond., vol. xii., p. 110, pl. 4, f. 3.

Hab.—Shoreham, Western Port.

Obs. - A small, pale buff coloured species.

ISCHNOCHITON ARBUTUM, Reeve.

1908. Ischnochiton arbutum, Reeve. Gatliff and Gabriel P.R.S., Vic. (New Series), vol. xxi., p. 384.

Obs.—Having received specimens of this species from Iredale, which were obtained at Cape York, Queensland, and that have been compared with the type, we find that our previous record has been made upon a wrongful identification, and therefore withdraw it as occurring on our shores.

ISCHNOCHITON SCULPTUS, Sowerby.

1908. Ischnochiton sculptus, Sowerby. Gatliff and Gabriel. P.R.S. Vic. (New Series), vol. xxi., p. 383.

Obs.—We also withdraw the record of this species occurring on our coast. Our shell so identified was subsequently named Ischnochiton falcatus, Hull.

ISCHNOCHITON LINEOLATUS, Blainville.

1825. Chiton lineolatus, Blainville, Dict. Sc. Nat. vol. xxxv., p. 541.

1893. Chiton lineolatus, Blainville. Pilsbry, Tryon's Man. Conch. vol. xv., p. 105.

1916. Ischnochiton lineolatus, Blainville. Iredale and May, P. Mal. Soc. Lon., vol. xii., p. 108, pl. 4, f. 1.

Hab.—Port Phillip Heads; Port Fairy; Western Port.

Obs.—At the reference last quoted above, it is stated that the identification of this species by Australian and Tasmanian writers as being I.contractus, Reeve, is incorrect. Iredale and May have now identified it as I.lineolatus.

ISCHNOCHITON (STENOCHITON) PALLENS, Ashby.

1900. Ischnochiton (Stenochiton), pallens, Ashby, T.R.S.S.A. vol. xxiv., p. 86, pl. 1, f. 1 a-e.

1912. Ischnochiton (Stenochiton) pallens, Ashby. Torr, Id. vol. xxxvi., p. 143.

Hab.—Port Phillip Heads.

Obs.—When examining at the National Museum the collection of Chitons obtained by Wilson, and dealt with by Sykes, we noted that he had wrongly identified one as I.juloides, Adams and Angas. We considered it to be what was subsequently named I.pallens, Ashby. The Curator kindly lent us the specimen to send to Mr. Ashby for his opinion. Mr. Ashby writes to us upon it: "While it may be

classed with pallens, you will note several differences. In yours the lateral areas are more raised, and the growth lines are strongly in evidence, which is not the case with pallens. The angle of the anterior valve in yours is not quite the same; yours shows a slight bulge towards the apex. While the anterior valve in yours is short, it is barely as proportionately short as in pallens, but it certainly has a short anterior valve so characteristic of pallens. The posterior valve does not show the mucro far back on a long valve, but that may be due to its damaged condition. Yours suggests a little more carination, but this may also be due to damage. In conclusion I should place your shell with pallens."

Mr. Ashby kindly sent us his only co-type for comparison. We quite agree with his remarks. Our specimen is not quite half the length of the co-type. We have not yet found I. juloides on our coast.

CARDIUM CYGNORUM, Deshayes.

1903. Cardium cygnorum, Deshayes. Pritchard and Gatliff, P.R.S. Vic., vol. xvi. (New Series), p. 135.

1916. Cardium cygnorum, Deshayes. Hedley, J.R.S.W. Aust., vol. 1, for 1915, p. 13.

1917. Cardium cygnorum, Deshayes Hedley, P.L.S. N.S.W., vol. xli. p. 686, pl. 52, fig. 41.

Hab.—Old valves occasionally obtained at Carrum, Rye, Portsea, Port Phillip; dredged alive Western Port.

Obs.—Mr. Hedley has figured this species for the first time.

Genus Marcia, H. and A. Adams, 1857.

MARCIA NITIDA, Quoy and Gaimard.

1835. Venus nitida, Quoy and Gaimard. Astrolabe Zool., vol. iii., p. 529, pl. 84, fig. 13, 15 (in the text the figures are wrongly given as 13, 14).

1904. Chione nitida, Quoy and Gaimard. Hedley, P.L.S. N.S.W., vol. xxix., p. 194.

1906. Chione nitida, Quoy and Gaimard. Pritchard and Gatliff, P.R.S. Vic., vol. xviii, (New Series). p. 67.

1909. Marcia fumigata, Sowerby. Jukes-Browne, P. Mal. Soc. Lond., vol. viii., p. 237, 244.

1914. Marcia fumigata, Sowerby. Jukes-Browne, P. Mal-Soc. Lond., vol. xi., p. 88. 1917 Marcia nitida, Quoy and Gaimard. Hedley, P.L.S. N.S.W., vol. xli., 1916, p. 691, pl. 46, figs. 2, 3.

1917. Marcia nitida, Quoy and Gaimard. Chapman and Gabriel, P.R.S. Vic., vol. xl. (New Series), p. antea.

Hab.—Common in Port Phillip; Portland.

Obs.—Jukes-Browne has reviewed somewhat exhaustively the Family Veneridae, and has made Adams' Chione, subgen. Marcia into a genus.

Dosinia grata, Deshayes. (Pl. iii.).

1853. Dosinia grata, Deshayes. Cat. Brit. Mus. Biv. p. 8.

1858. Dosinia grata, Deshayes. Adams' Genera, vol. ii., p. 431.

1862. Dosinia grata, Deshayes. Römer, Mon. Dosinia, p.
19.

1868. Dosinia grata, Deshayes. Pfeiffer, Malak, Blatt. vol. xv., p. 146.

1897. Dosinia grata, Deshayes. Tate, T.R.S.S.A., vol. xxi., p. 47.

1913. Dosinia grata, Deshayes. Hedley, P.L.S. N.S.W., vol. xxxviii., p. 270.

Hab.—Dredged 5 to 8 fathoms, Western Port; also dredged off Portsea, Port Phillip.

Obs.—A left valve, 30×40 mm. was forwarded to Mr. T. Iredale, London, for comparison with types, and he writes: "Agrees exactly with the types in the British Museum of *Dosinia grata*, Deshayes... from Tasmania, collected by R. Gunn... Tate and May (p. 429), place *D.grata*, Deshayes, as a synonym of *D.circinaria*, Deshayes, which it is not, types compared."

Much confusion has arisen respecting this species, and to Australian conchologists its identification has been perplexing, owing in the first place to Tate giving a wrongful figure, and at the same time quoting D.diana, Adams and Angas, as a synonym. In 1897—reference above given—he corrected this, stating: "The type of D.diana, Adams and Angas, and the shell I figured as D.grata are certainly the same, but they are different from D.grata." Tate and May² cited the species as a synonym of D.circinaria, Deshayes, from

D. grata, Deshayes. Tate, T.R.S., S.A., vol. ix., 1886 (1887), p. 93, pl. v., fig. 15.
 P.L.S., N.S.W., vol. xxvi., 1901, p. 429.

which it may be distinguished by its sharp, erect, concentric lamellae. We are indebted for the kindness of Mr. F. Chapman. He photographed the identified shell figured on Plate III.

SPISULA TRIGONELLA, Lamarck.

- 1818. Mactra trigonella, Lamarck, An. s. Vert., vol. v., p. 479.
- 1853. Gnathodon parvum, Petit. Jour. de Conch., vol. iv., p. 358, pl. 13, fig. 9, 10.
- 1903. Spisula parva, Petit. Pritchard and Gatliff, P.R.S. Vic., vol. xvi. (New Series), p. 108.
- 1914. Mactra (Spisula), parva, Petit. Smith, P. Mal. Soc. Lond., vol. xi., p. 146.
- 1914. Mactra, trigonella, Lamarck. Lamy, Bull, Mus. Nat. Hist., p. 245.
- 1915. Spisula (Hemimactra), parva, Petit. Chapman, Geol. Surv. S. Aust., Bull, No. 4, p. 50.
- 1916. Mactra trigonella, Lamarck. Hedley, J.R.S., W. Aust. vol. i., for 1915, p. 20.
- 1917. Spisula trigonella, Lamarck. Hedley, P.L.S. N.S.W., vol. xli., 1916, p. 692.
- 1917. Spisula trigonella, Lamarck. Chapman and Gabriel, P.R.S. Vic., vol. xl. p. antea.

Hab.—Coast generally.

Obs.—Spisula parva is reduced to synonymy through the discovery of an earlier Lamarckian appellation. Dr. Lamy declares their specific identity.

LASAEA AUSTRALIS, Lamarck.

- 1818. Cyclas australis, Lamarck. Anim. s. vert., vol. v., p. 560.
- 1842-1856. Cyclas australis, Lamarck. Hanley, Cat. Recent Biv. Shells, p. 90.
- 1913. Cyclas australis, Lamarck. Lamy, Bulletin du Musd'Hist. nat. Paris, p. 466.
- 1914. Lasaea scalaris, Philippi. Gatliff and Gabriel, V.N. vol. xxxi., p. 84.
- 1915. Lasaea australis, Lamarck. Hedley, P.L.S. N.S.W., vol. xxxix., p. 702.
- 1916. Lasaea australis, Lamarck. Hedley, Jour. Roy. Soc. Western Australia, vol. i. for 1915, p. 13.

Hab.—Coast generally.

Obs.—A very variable shell. Lamarck's vol. v. is paged to 560, and then the pages following are again numbered 551 to 560. L.australis occurs on the first of the pages that are numbered 560.

Genus Brachydontes, Swainson, 1840.

BRACHYDONTES EROSUS, Lamarck.

1819. Mytilus erosus, Lamarck, Anim, s. Vert., vol. vi., p. 120.

1906. Mytilus erosus, Lamarck. Pritchard and Gatliff, P.R.S., Vic., vol. xviii. (New Series), for 1905, p. 69.

1916. Brachyodontes erosus, Lamarck. Hedley, Jour. Royal Soc., Western Australia, vol. i., for 1915, p. 9.

Hab.—San Remo; Polwarth Coast; Portland.

BRACHYDONTES (HORMOMYA) HIRSUTUS, Lamarck.

1819. Mytilus hirsutus, Lamarck, Anim, s. Vert. vol. vi., pt. 1, p. 120.

1904. Mytilus hirsutus, Lamarck. Pritchard and Gatliff, P.R.S. Vic., vol. xvii (New Series), p. 248.

1905. Brachyodontes (Hormomya) hirsutus, Lamarck. Jukes-Browne, P. Mal. Soc. Lond., vol. vi., p. 223.

Hab. -- Polwarth Coast; Kilcunda.

Brachydontes (Hormomya) Rostratus, Dunker.

1856. Mytilus rostratus, Dunker. P.Z.S. Lond., p. 358.

1904. Mytilus rostratus, Dunker. Pritchard and Gatliff, P.R.S., Vic., vol. xvii. (New Series), p. 247.

1905. Brachyodontes (Hormomya) rostratus, Dunker. Jukes-Browne, P. Mal. Soc., Lond. p. 223.

1916. Brachyodontes rostratus, Dunker. Hedley, Jour. Royal Soc. Western Australia, vol. i., for 1915, p. 10.

Hab.—Coast generally.

Modiola Pulex, Lamarek.

1819. Modiola pulex, Lamarck, Anim. s. vert., vol. vi., p. 112.

1904. Modiola ater, Zelebor. Pritchard and Gatliff, P.R.S. Vic. vol. xvii (New Series), p. 249.

1913. Modiola pulex, Lamarck. Hedley, P.L.S. N.S.W., vol. xxxviii., p. 265.







